R3G225-AE15-10

EC centrifugal fan

backward curved

R3G225-AE15-10 ebmpapst Datasheet
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Nominal data

Type	**R3G225-AE15-10**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	50
Type of data definition		fa
Speed	min^{-1}	2200
Power input	W	58
Current draw	A	0.83
Min. ambient temperature	°C	-
Max. ambient temperature	°C	50

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

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Technical features

Mass	1.5 kg
Size	225 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	Plastic PA66, fibreglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - PWM control input
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
Motor protection	Locked-rotor protection
Cable exit	Variable
Approval	UL 507

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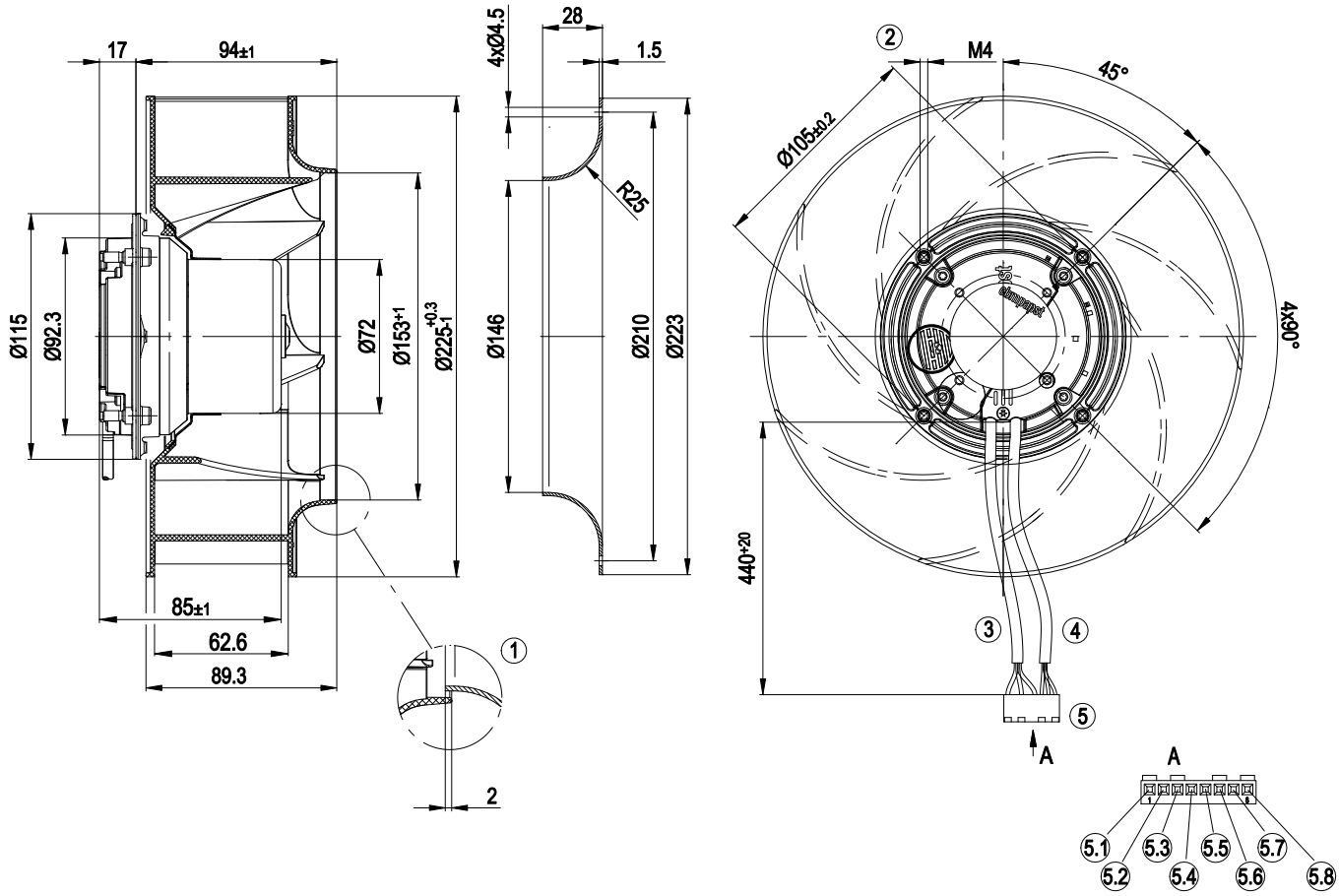
Product drawing



1	Accessory part: Inlet nozzle 96358-2-4013, not included in the standard scope of delivery
2	Thread of the set screw: 10-24 UNC
3	Connection line AWG20 UL style 2517, 3 x plug pin Molex 08-50-0105 crimped
4	Connection line AWG22 UL style 2464, 3 x plug pin Molex 08-50-0105 crimped
5	Connector housing Molex 09-50-8081
5.1	AC 230V / 115 V (brown)
5.2	N.C. (not assigned)
5.3	AC neutral (blue)
5.4	N.C. (not assigned)
5.5	PE (green / yellow)
5.6	Open loop speed control (yellow)
5.7	Tach output (white)
5.8	GND (blue)

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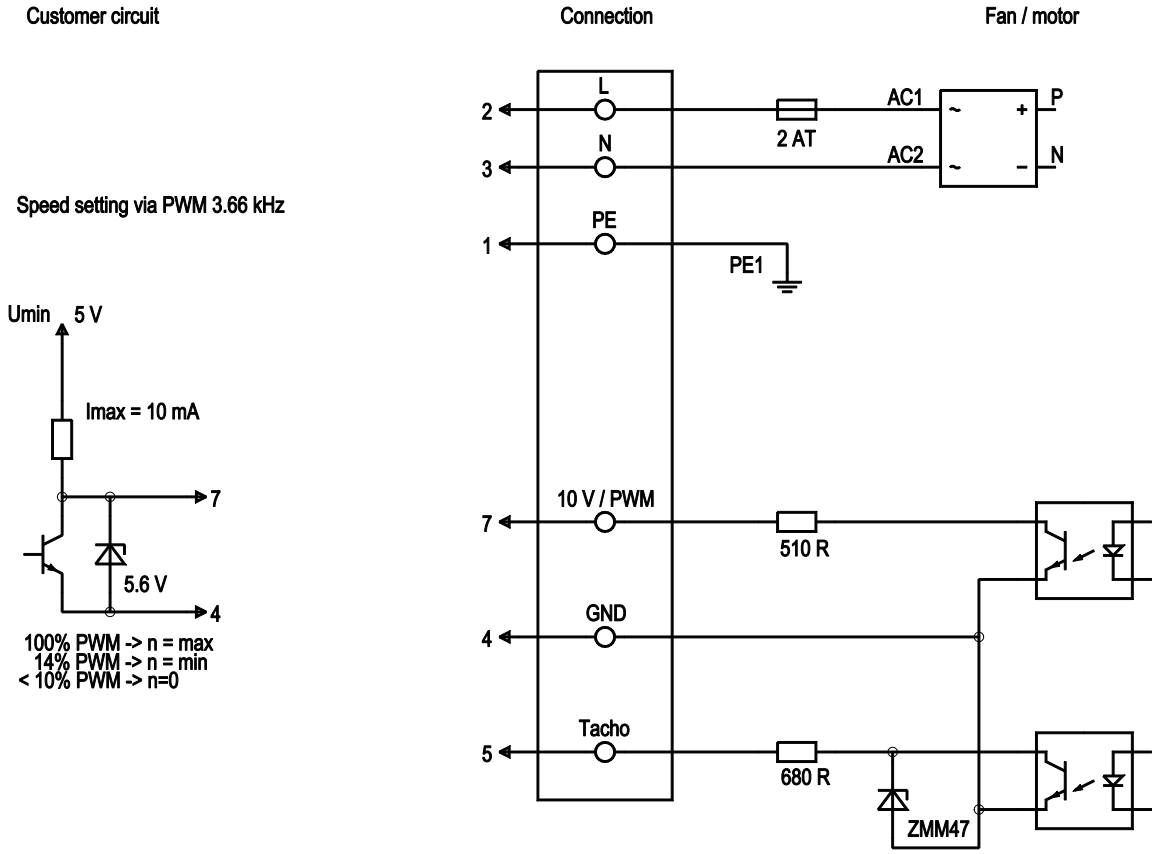
Connection screen



Line	No.	Signal	Colour	Function / assignment
	1	PE	green/yellow	Protective earth
	2	L	brown	Power supply 115 VAC, 50-60 Hz
	3	N	blue	Neutral conductor
	4	GND	blue	GND - Connection for control interface
	5	Tach	white	Tach output: Open Collector, 1 pulse per revolution, electrically isolated
	7	PWM	yellow	PWM control input, electrically isolated

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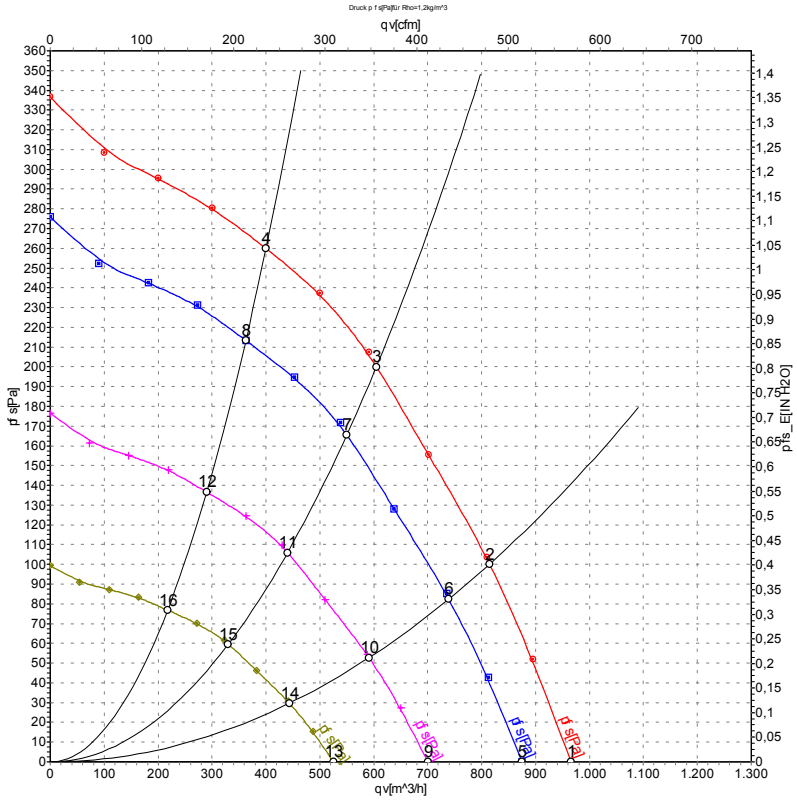
Charts: Air flow 50 Hz



Measurement: LU-68533

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_{ed}	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	115	50	2200	58	0.83	965	0
2	115	50	2200	72	1.04	815	100
3	115	50	2200	80	1.15	605	200
4	115	50	2200	78	1.12	400	260
5	115	50	2000	43	0.63	875	0
6	115	50	2000	54	0.78	740	83
7	115	50	2000	60	0.87	550	166
8	115	50	2000	58	0.84	365	214
9	115	50	1600	22	0.32	700	0
10	115	50	1600	28	0.40	590	53
11	115	50	1600	31	0.44	440	107
12	115	50	1600	30	0.43	290	137
13	115	50	1200	9.4	0.14	525	0
14	115	50	1200	12	0.17	445	30
15	115	50	1200	13	0.19	330	60
16	115	50	1200	13	0.18	220	77

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase